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AZ CORP COMMISSION
DOCKET CONTROL

April 1, 2009

Ernest Johnson
Director, Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Re: Docket No. E-04204A-06-0783, Decision No. 70360

Mr. Johnson,

Pursuant to Decision No. 70360 (May 27, 2008) UNS Electric, Inc. ("UNS Electric") is required to submit semi-annual Demand-Side Management ("DSM") program progress reports on April 1st and October 1st of each year in accordance with Arizona Corporation Commission Staff's recommendations. Enclosed please find UNS Electric's Semi-Annual DSM Program Progress Report for the reporting period of July 1, 2008 through December 31, 2008. The marketing materials for the reported DSM programs are being filed directly with Commission Staff on the attached CD.

Also enclosed is an additional copy that the Company requests you to date-stamp and return in the self-addressed, stamped envelope for our files.

If you have any questions, please contact me at (520) 884-3680.

Sincerely,

Jessica Bryne

Jessica Bryne
Regulatory Services

Enclosures: Report and CD

cc: Docket Control, ACC (w/o CD)
Julie McNeely-Kirwan, ACC (with CD)
Compliance, ACC (w/o CD)
Shannon Kanlan, ACC (w/o CD)

Arizona Corporation Commission
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UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

This progress report includes the following information for all UNS Electric, Inc. ("UNS Electric" or "Company") Demand-Side Management ("DSM") programs that were in place during this reporting period, including programs for residential, non-residential, and low-income customers:

- A brief description of the program;
- Program modifications;
- Program goals, objectives, and savings targets;
- Programs terminated;
- The levels of participation;
- A description of evaluation and monitoring activities and results;
- kW, kWh, and therm savings;
- Problems encountered and proposed solutions;
- Costs incurred during the reporting period disaggregated by type of cost, such as administrative costs, rebates, and monitoring;
- Findings from all research projects; and
- Other significant information.

Summary pages detailing DSM program expenses for July through December 2008 and for the entire year are provided in Tables 1 and 2. Program savings benefits are provided in Table 3. Lifetime Environmental benefits are provided in Table 4. Program savings and costs since program inceptions are provided in Table 5.

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

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UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

Table 1

DSM PROGRAM EXPENSES: JULY - DECEMBER 2008

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Residential Programs							
Low-Income Weatherization	\$ 80,394	\$ -	\$ -	\$ 6,916	\$ -	\$ 3,646	\$ 90,955
Energy Smart Homes	\$ -	\$ 1,320	\$ 270	\$ 66,854	\$ 4,752	\$ 1,582	\$ 74,779
Efficient Home Cooling	\$ 6,750	\$ 363	\$ -	\$ 6,542	\$ 1,950	\$ 1,367	\$ 16,972
Energy Star Lighting (CFL)	\$ -	\$ -	\$ 2,050	\$ 8,790	\$ 4,330	\$ 1,560	\$ 16,730
Shade Tree Program	\$ -	\$ -	\$ -	\$ 2,202	\$ -	\$ 588	\$ 2,790
Total for Residential Programs	\$ 87,144	\$ 1,683	\$ 2,320	\$ 91,303	\$ 11,032	\$ 8,743	\$ 202,226
Support Programs							
Education & Outreach Programs	\$ -	\$ -	\$ 79,907	\$ 17,539	\$ -	\$ 1,823	\$ 99,270
Total for Support Programs	\$ -	\$ -	\$ 79,907	\$ 17,539	\$ -	\$ 1,823	\$ 99,270
Commercial Programs							
Commercial Facilities Efficiency	\$ -	\$ 45	\$ -	\$ 2,650	\$ -	\$ 679	\$ 3,375
Total for Commercial Programs	\$ -	\$ 45	\$ -	\$ 2,650	\$ -	\$ 679	\$ 3,375
Segment Totals	\$ 87,144	\$ 1,728	\$ 82,228	\$ 111,493	\$ 11,032	\$ 11,245	\$ 304,870

Program Costs	\$ 304,870
Measurement, Evaluation & Research (MER)	\$ 101,045
TOTAL	\$ 405,915

Table 2

DSM PROGRAM EXPENSES: JANUARY - DECEMBER 2008

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Residential Programs							
Low-Income Weatherization	\$ 80,394	\$ 3,000	\$ -	\$ 8,324	\$ -	\$ 5,105	\$ 96,823
Energy Smart Homes	\$ -	\$ 2,608	\$ 773	\$ 73,555	\$ 5,662	\$ 7,215	\$ 89,813
Efficient Home Cooling	\$ 6,750	\$ 363	\$ -	\$ 6,542	\$ 1,950	\$ 1,367	\$ 16,972
Energy Star Lighting (CFL)	\$ -	\$ -	\$ 2,050	\$ 8,790	\$ 4,330	\$ 1,560	\$ 16,730
Shade Tree Program	\$ -	\$ -	\$ -	\$ 2,202	\$ -	\$ 588	\$ 2,790
Total for Residential Programs	\$ 87,144	\$ 5,971	\$ 2,823	\$ 99,412	\$ 11,942	\$ 15,836	\$ 223,127
Support Programs							
Education & Outreach Programs	\$ -	\$ 1,334	\$ 86,610	\$ 18,944	\$ 5,871	\$ 6,517	\$ 119,277
Total for Support Programs	\$ -	\$ 1,334	\$ 86,610	\$ 18,944	\$ 5,871	\$ 6,517	\$ 119,277
Commercial Programs							
Commercial Facilities Efficiency	\$ -	\$ 45	\$ -	\$ 2,650	\$ -	\$ 679	\$ 3,375
Total for Commercial Programs	\$ -	\$ 45	\$ -	\$ 2,650	\$ -	\$ 679	\$ 3,375
Segment Totals	\$ 87,144	\$ 7,350	\$ 89,433	\$ 121,007	\$ 17,813	\$ 23,032	\$ 345,778

Program Costs	\$ 345,778
Measurement, Evaluation & Research (MER)	\$ 115,667
TOTAL	\$ 461,445

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

Definitions

Rebates & Incentives – Includes dollars that go toward customer rebates and incentives as well as payments made to agencies for installation of low-income weatherization measures.

Training and Technical Assistance – Includes all dollars that are used for energy-efficiency training and technical assistance.

Consumer Education – Includes dollars that are used to support general consumer education about energy-efficiency improvements.

Program Implementation – Program delivery costs associated with implementing the program – includes implementation contractor (“IC”) labor and overhead costs, as well as other direct program delivery costs.

Program Marketing – Includes all expenses related to marketing the program and increasing DSM consumer awareness (direct program marketing costs as opposed to general consumer education).

Planning and Administration – Costs to plan, develop, and administer programs – includes management of program budgets, oversight of the RFP process and IC program development, program coordination, and general overhead expenses.

Measurement, Evaluation, and Research (“MER”) – These activities will identify current baseline efficiency levels and the market potential of DSM measures, perform process evaluations, verify that energy-efficient measures are installed, track savings, and identify additional energy-efficiency research. Costs include the development of a database to track participation and savings.

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

Table 3

DSM SAVINGS BENEFITS: JULY – DECEMBER 2008

DSM Program	Capacity Savings kW	Lifetime MWH Savings	Lifetime Therm Savings	Program Cost (less incentives)	Societal Benefits	Societal Costs	Net Benefits*
Residential							
Low-Income Weatherization	0	680	22,320	\$ 16,429	\$ 96,773	\$ 96,773	\$ -
Energy Smart Homes	3	63	3,832	\$ 89,813	\$ 7,269	\$ 92,558	\$ (85,289)
Shade Tree Program	0	0	0	\$ 2,790	\$ -	\$ 2,790	\$ (2,790)
Energy Star Lighting (CFL)	0	0	0	\$ 16,730	\$ -	\$ 16,730	\$ (16,730)
Efficient Home Cooling	12	490	0	\$ 10,222	\$ 28,401	\$ 23,608	\$ 4,793
Total for Residential	15	1,233	26,152	\$ 135,983	\$ 132,442	\$ 232,458	\$ (100,016)
Non-Residential							
Commercial Facilities Efficiency	0	0	0	\$ 3,375	\$ -	\$ -	\$ (3,375)
Segment Totals	15	1,233	26,152	\$ 139,358	\$ 132,442	\$ 232,458	\$ (103,390)

*Consistent with Commission Staff's analysis in Decision No. 70347, the societal benefits for low-income weatherization are equal to or greater than the societal costs when taking the environmental benefits into account.

Table 4

DSM ENVIRONMENTAL SAVINGS: JANUARY – DECEMBER 2008

Program	Lifetime SOX Reduction (lbs)	Lifetime NOX Reduction (lbs)	Lifetime CO2 Reduction (tons)	Lifetime Water Reduction (gallons)
Low -Income Weatherization	537	1,714	1,369,446	158,496
Energy Smart Homes	50	159	147,573	14,667
Efficient Home Cooling	387	1,235	797,160	114,230
Energy Star Lighting (CFL)	0	0	0	0
Shade Tree	0	0	0	0
Commercial Facilities Efficiency	0	0	0	0
Program Totals	0	0	0	0

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

Table 5

DSM SAVINGS & COSTS SINCE PROGRAM INCEPTION: JANUARY 1992 – DECEMBER 2008¹

PROGRAM	ACC Staff Approval	2008 Participants		2008 Program Costs		MW		MWh		Therm	
		Jan - Dec	PTD	Jan - Dec	PTD	Jan - Dec	PTD Savings	Jan - Dec	PTD Savings	Jan - Dec	PTD Savings
Residential											
Energy Smart Homes	2007	3	8	\$ 89,813	\$ 169,911	0.003	0.0112	3	29	0	1,593
Good Cents Homes*	1994	0	452	\$ -	\$ 617,706	0	1.20	0	6,228	NA	NA
Shade Tree	2008	0	0	\$ 2,790	\$ 2,790	0	0.00	0	0	NA	NA
Energy Star Lighting (CFL)	2008	0	0	\$ 16,730	\$ 16,730	0	0.00	0	0	NA	NA
Efficient Home Cooling	2008	29	29	\$ 16,972	\$ 16,972	0.012	0.012	33	33	NA	NA
*Cumulative MWh savings were under-reported in the 2008 mid-year DSM report and have been corrected in this report.											
Commercial											
Commercial Facilities Efficiency	2008	0	0	\$ 3,375	\$ 3,375	0	0	0	0	0	0
Support Programs											
Education & Outreach**	1994	2,243	11,548	\$ 119,277	\$ 3,069,652	0	6.32	0	104,674	NA	NA
Low-Income Weatherization	1994	44	321	\$ 96,823	\$ 227,041	0	0.13	34	644	0	8,724
**Includes all numbers previously reported separately under Residential and Commercial Energy Survey. Cumulative MWh savings were under-reported in the 2008 mid-year DSM report and have been corrected in this report.											
TOTAL		2,319	12,358	\$ 345,778	\$ 4,124,176	0.015	7.67	70	111,607	0	10,317

¹ Historical DSM Program savings will decrease as the measure lifetimes expire. Programs with fully expired lifetimes will no longer be reported. Historical programs include Good Cents and historical measures previously reported under Residential and Commercial Surveys and currently reported under Education & Outreach. PTD = Program to date; MWh and therm savings are cumulative.

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

UNS ELECTRIC LOW-INCOME WEATHERIZATION PROGRAM

Description

The UNS Electric Low-Income Weatherization ("LIW") Program ("Program") is designed to improve the energy efficiency of homes for customers whose income falls within the defined federal poverty guidelines. By the steps taken in this program, UNS Electric will be reducing gas and electric bills for these eligible customers. Savings from these measures will help the customers utilize their limited income for other necessary items such as rent, food, or medical expenses.

Program Modifications

In May 2008, UNS Electric received Arizona Corporation Commission ("Commission") approval to increase annual funding from \$70,000 to \$105,000. In addition, the allocation per home was increased from \$1,600 to \$2,000. Beginning January 2008, UNS Electric notified agencies that all weatherization measures utilized by the agencies must pass the cost-effectiveness test detailed in the Arizona Energy Office ("AEO") Weatherization Assistance Program ("WAP") rules. WAP rules include not only consideration of energy efficiency, but also consideration of comfort and the health and safety attributes of homes. The agencies will process the details of the repairs for each house using the AEO online WAP database. The AEO will collect all the data submitted by the agencies and will provide UNS Electric with the necessary periodic reports.

Program Goals, Objectives, and Savings Targets

- To increase the number of homes weatherized each year.
- Lower the average household utility bills of low income customers by utilizing energy conservation measures in the weatherization process.
- Improve the quality of life for customers by providing them with a safer and healthier home.

Levels of Participation

A total of 44 households received weatherization assistance during the second six months of 2008. Some agencies turn in the majority of their invoices at the end of the year, typically in the 3rd and 4th quarter. As expected, UNS Electric received a greater number of funding requests in the second half of 2008 than in the first.

Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period. The AEO is receiving billing data from UNS Electric for the homes weatherized and is working on evaluation for future reports.

kW, kWh, and Therm Savings²

No. of Homes	kW savings	kWh savings	Therm savings
44	NA	34,012	1,116

² Savings are estimated for UNS Electric customers by using the Savings-to-Investment Ratio provided in the 2007 AEO report for APS and SWG. Once sufficient local records are available, the AEO will provide analysis on actual energy savings for UNS Electric customers. The AEO does not provide kW savings and they will no longer be reported.

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

Problems Encountered and Proposed Solutions

At this time, the AEO does not have sufficient historical energy usage on UNS Electric customers participating in the program. AEO requires a minimum of two years of billing data with a preference of four years of data for each customer. However, the AEO is now receiving online billing history from UNS Electric, so billing information is now being collected.

Costs Incurred

Costs incurred for this program during the reporting period are listed below:

DSM Program	Rebates & Incentives*	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Low-Income Weatherization	\$ 80,394	\$ -	\$ -	\$ 6,916	\$ -	\$ 3,646	\$ 90,955
Total	\$ 80,394	\$ -	\$ -	\$ 6,916	\$ -	\$ 3,646	\$ 90,955

**Includes \$1,500 for health and safety related repairs*

Findings from All Research Projects

No research projects were performed during this reporting period.

Other Significant Information

Funding from UNS Electric for all agencies will increase by 3% in 2009. Additionally, all agencies statewide will be seeing a significant increase in their federal funding for weatherization sometime in 2009. According to the AEO, Arizona could be receiving upwards of \$30 million over the next two years for low-income assistance including weatherization. For Arizona, the AEO is suggesting all agencies ramp up production by a factor of 5 to 10. President Obama's goal is to weatherize one million homes annually compared to the one hundred thousand being weatherized currently. What that means for our statewide agencies is an annual increase from approximately 700 homes to as many as 7,000. This will require significant investment in training weatherization crews, but has the potential to create a large number of jobs.

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

UNS ELECTRIC ENERGY SMART HOMES PROGRAM

Description

The Residential New Construction Program for UNS Electric is marketed under the name of Energy Smart Homes ("ESH"). The ESH Program ("Program") will emphasize the whole-house approach to improving health, safety, comfort, durability, and energy efficiency. The Program will promote homes that meet the 2006 EPA/DOE Energy Star Home[®] performance requirements. To encourage participation, the Program will provide incentives to homebuilders for each qualifying home. Required on-site inspections and field testing of a random sample of homes to meet Energy Star Home[®] performance requirements will be conducted by third-party RESNET certified energy raters selected by each builder. Components of ESH include development of branding, builder training curriculum, and marketing material.

Program Modifications

No modifications for this reporting period.

Program Goals, Objectives, and Savings Targets

- Work with local builders to construct energy-efficient homes;
- Train builder construction staff and subcontractors in advanced building science concepts to increase energy efficiency through improved design and installation practices;
- Transform the market and improve construction practices in the UNS Electric service territory;
- Reduce peak demand and overall energy consumption in new homes;
- Assist builder sales agents with promoting and selling energy-efficient homes;
- Increase homebuyer awareness and understanding of energy-efficient building practices and the benefits of purchasing an energy-efficient home; and
- Achieve an annual participation of between 9% and 11% of new home units.

Levels of Participation

Three Energy Smart Homes were completed during this reporting period. There are ten Energy Smart Homes under construction in Santa Cruz and Mohave Counties. Participants include CastleRock Homes, Dorn Homes, Eagle View, Innovative Homes, Magic Homes, and Stonegate Communities.

Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period. Summit Blue Consulting ("Summit Blue") has been selected as the MER contractor for the UNS Electric DSM programs (excluding LIW and Education & Outreach) and is in the process of developing a MER plan.

kW, kWh, and Therm Savings

No. of Homes	kW savings	kWh savings	Therm savings
3	471	728,208	41

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

Problems Encountered and Proposed Solutions

The UNS Electric territory has experienced a significant decrease in new home sales, consistent with decreases in other areas of Arizona. This reduces the number of homes available to be built to increased energy-efficiency standards. Builders, in an attempt to increase sales, have been cutting prices and looking for ways to reduce costs. This downward pressure on profit margins makes it harder to convince builders to incur the added costs of building an energy-efficient home. However, there is increasing interest by some builders to distinguish their products by offering higher quality and lower operational cost to the consumer. By supporting these builders, the ESH Program may position itself for rapid growth when the market improves.

The ESH program is pursuing partnerships with mortgage brokers and lenders that have specialized loan programs for energy-efficient homes and green buildings. These partnerships will further serve participating builders in expanding their market share and provide additional program outreach to the general buying public.

Costs Incurred

Costs incurred for this program during the reporting period are listed below:

DSM Program	Rebates & Incentives*	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Energy Smart Homes	\$ -	\$ 1,320	\$ 270	\$ 66,854	\$ 4,752	\$ 1,582	\$ 74,779
Total	\$ -	\$ 1,320	\$ 270	\$ 66,854	\$ 4,752	\$ 1,582	\$ 74,779

**Homes completed in Santa Cruz County have the option of either receiving an incentive or having UNS Electric perform the necessary inspections and testing needed for Energy Star certification. The three homes completed in 2008 are located in Santa Cruz County.*

Findings from All Research Projects

No research projects have been undertaken during this time period.

Other Significant Information

In April 2008, Conservation Services Group ("CSG") was chosen as the IC for the ESH Program. During this reporting period CSG and UNS Electric have jointly visited markets and met with builders.

CSG has recommended to UNS Electric that an additional tier be evaluated for the ESH program. Some builders in the market are already building homes that exceed Energy Star standards. These builders are looking to further distinguish themselves in the green building market, and could be encouraged to achieve more savings with a higher incentive level and more market recognition. UNS Electric is considering additional tiers to encourage more program participation.

Please see the attached CD for copies of the new marketing materials. The material includes yard signs, postcards, and marketing brochures listed in Appendix 1.

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

Events planned in the next quarter include:

1. Northern Arizona Builders Association local meetings in Kingman and Lake Havasu City;
 2. Sales presentations to local real estate and sales groups throughout the quarter;
 3. Winterfest by the Chamber of Commerce, February 7th and 8th in Lake Havasu City;
 4. Southern Arizona Homebuilder Association, Green Council, monthly involvement;
 5. Colorado River Building Industry Association, regular program attendance and outreach;
 6. ESH presentation to the Santa Cruz Co. Planning Commission at the February meeting; and
 7. Build It Green Expo and Conference, March 13th and 14th in Phoenix.
-

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

UNS ELECTRIC EDUCATION AND OUTREACH PROGRAMS

COMMERCIAL AND RESIDENTIAL EDUCATION PROGRAMS

Description

The UNS Electric commercial and residential education programs are designed to educate customers on energy use and assist them with energy savings suggestions. The primary tool to assist customers is the online Energy Advisor which provides the customer with more than 140 energy savings recommendations or measures and can be personalized for weather and utility rates based on the customer's zip code. UNS Electric promotes the Energy Advisor online audit through a variety of advertising promotions such as bill inserts, web advertising, and radio advertising.

During this reporting period, UNS Electric participated in the Home Depot Energy Fair. This was a 3-day event attracting several hundred residents and business owners in Kingman and surrounding areas. UNS Electric provided conservation and energy-efficiency information to attendees, as well as promoting the benefits of Compact Fluorescent Lighting and energy-efficient new construction practices. Handouts included the U.S. Department of Energy's *Energy Savers Book*, UNS Electric Energy Advisor brochures, and UNS Electric Efficient Home Cooling Brochures. Additionally, a representative from UNS Electric spoke at the Kingman Rotary regarding energy conservation tips and the DSM programs. The same handouts were distributed at this event.

Program Modifications

On July 3, 2008 UNS Electric received Commission approval for a new Education and Outreach Program ("Program"). This new program combines the existing Customer and Academic Education programs and includes education and awareness for new UNS Electric Time-of-Use ("TOU") rates. UNS Electric broadened its advertising during this reporting period to increase awareness of the Energy Advisor and the benefits of utilizing TOU rates. On October 1, 2008, UNS Electric launched its new PowerShift campaign which introduced customers to the new TOU rates. A variety of advertising venues have been used during this reporting time frame which includes:

- Bill Inserts and Bill messages;
- Brochures;
- In house advertising on uesaz.com;
- Media Q&A, Newspaper & Radio ads;
- Tradeshows/Community events and premium giveaways; and
- Call Center Training.

Program Goals, Objectives, and Savings Targets

The Program is designed to educate commercial and residential customers on ways to save energy through conservation measures, energy-efficiency measures or utilizing TOU rates.

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

Levels of Participation

Energy Advisor

For this reporting period 1,008 residential customers and 194 commercial customers accessed the online Energy Advisor, with 521 residential customers and 10 commercial customers completing an online energy audit.

For the year 2008 1,564 residential customers and 309 commercial customers accessed the online Energy Advisor, with 741 residential customers and 17 commercial customers completing an online energy audit. This is an increase of 17% for residential customers accessing the Energy Advisor, and 103% completing an online audit from 2007. Commercial customers accessing the Energy Advisor decreased by 6% from 2007, however there was a 1,700% increase in completing an online audit. This implies that commercial customers accessing the online tool are more focused on looking for specific information on their facility and looking for ways to reduce their energy consumption. In 2009, UNS Electric plans to survey commercial customers that accessed the Energy Advisor during 2008 to better understand what is necessary to increase the number of commercial customers completing an online energy audit.

PowerShift ("TOU")

For this reporting period 101 customers took advantage of the new PowerShift TOU Program.

Problems Encountered and Proposed Solutions

To increase participation, UNS Electric plans to increase advertising and promotion of the online energy audit to its residential and commercial customers. UNS Electric will boost program awareness with more media coverage including radio advertising, bill stuffers, brochures, web-based advertising, newsletters, and continued encouragement from customer service representatives. Utilizing UNS Electric's continuing partnerships with local school teachers, students and their families will be encouraged to use the online energy audit as an excellent source in learning how to implement energy savings measures at home. Additionally, the online energy audit is being enhanced to provide easy accessibility, more flexibility, and improved reporting, as well as more prominent website placement of the appliance calculators to promote increased participation.

ACADEMIC EDUCATION PROGRAM

Description

UNS Electric offers several school education programs that cover a variety of topics related to energy, natural resource conservation, and environmental awareness. These programs are currently targeted to students in grades K-8. In addition to making available age-appropriate class sets of booklets (with teachers' guides) about electricity, energy efficiency, and conservation to schools, UNS Electric's Academic Education Program provides on-site classroom presentations.

During this reporting period 6 classroom presentations were made to approximately 150 4th grade students. These classroom presentations educate students on the value and importance of conservation, energy efficiency, and protecting our environment, as well as electrical safety. Materials provided include the booklets *Learning to Save Energy Activity Book*, *Let's Learn About Energy and Protecting our Environment* and the U.S. Department of Energy's *Energy Savers – Tips on Saving Energy and Money at Home* to be shared with the student's parents.

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

Levels of Participation

Participation for this reporting period is listed below:

<i>Program</i>	<i>Number of Schools</i>	<i>Number of Students</i>
Classroom Presentations	1 school/ 6 teachers	150 est.
Energy Conservation/Environmental classroom materials	108 schools/ 183 teachers	13,523
TOTAL	109	13,673

Program Modifications

No modifications were made during this reporting period.

Program Goals and Objectives

These programs are all designed to educate students and their families on ways to save energy and to provide hands-on experiences, putting to test the options for saving energy.

ALL EDUCATION & OUTREACH PROGRAMS

Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period. In 2009 TEP plans to survey its customers to determine how well the marketing campaigns are educating customers on:

- The existence and availability of DSM programs;
- Influencing their behavior regarding energy use;
- Purchasing energy-efficient appliances;
- Utilizing TOU rate strategies; and
- Availability and ease of use for the online Energy Advisor.

kW, kWh, and Therm Savings

There are no kW, kWh or therm savings associated with these programs.

Costs Incurred

Costs incurred for all Education and Outreach Programs during this reporting period are listed below:

DSM Program	Academic Education	Consumer Education	Time of Use Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Education & Outreach	\$ 3,822	\$ 53,036	\$ 23,049	\$ 17,539	\$ -	\$ 1,823	\$ 99,270
Total	\$ 3,822	\$ 53,036	\$ 23,049	\$ 17,539	\$ -	\$ 1,823	\$ 99,270

Findings from All Research Projects

No research projects were performed during this reporting period.

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

Other Significant Information

For this reporting period UNS Electric showed an increase in participation with the Energy Advisor and a start up of approximately 30 TOU customers per month. Although the 2009 marketing plan for E & O is still being developed, the Company anticipates that it will continue with a similar marketing strategy to further increase awareness and participation in these programs. Please see the attached CD for copies of the marketing materials.

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

UNS ELECTRIC EFFICIENT HOME COOLING PROGRAM

Description

On June 13, 2008, the Commission approved the UNS Electric Residential HVAC Retrofit Program, marketed under the name of Efficient Home Cooling Program ("EHC" or "Program"). This program promotes the installation of high-efficiency air conditioning and heat pump systems in existing homes in UNS Electric service territory. UNS Electric launched the program September 2, 2008. UNS Electric has selected KEMA for rebate processing.

Program Modifications

No modifications for this reporting period.

Program Goals, Objectives and Savings Targets

- Promote the installation of high-efficiency air conditioners and heat pumps;
- Reduce customer energy bills, provide equal or better comfort conditions, conserve energy and benefit the environment; and
- Achieve target participation of 700+ air conditioners and heat pumps installed per year.

Levels of Participation

For this reporting period, UNS Electric has paid rebates on 29 HVAC units as follows:

- 14 SEER AC: 4 (\$227 incremental cost)
- 14 SEER HP: 6 (\$310 incremental cost)
- 15 SEER AC: 1 (\$674 incremental cost)
- 15 SEER HP: 13 (\$678 incremental cost)
- 16 SEER AC: 1 (\$808 incremental cost)
- 16 SEER HP: 4 (\$915 incremental cost)

Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period. Summit Blue has been selected as the MER contractor for the UNS Electric DSM programs (excluding LIW and Education & Outreach) and is in the process of developing a MER plan.

kW, kWh, and Therm Savings

No. of Units Installed	kW savings	kWh savings	Therm savings
29	12	32,684	0

Problems Encountered and Proposed Solutions

No problems were encountered during this reporting period.

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

Costs Incurred

Costs incurred for this program during the reporting period are listed below:

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Efficient Home Cooling	\$ 5,550	\$ 363	\$ -	\$ 6,542	\$ 1,950	\$ 1,367	\$ 15,772
Total	\$ 5,550	\$ 363	\$ -	\$ 6,542	\$ 1,950	\$ 1,367	\$ 15,772

No rebates were paid to contractors in this reporting period.

Findings from All Research Projects

No research projects have been undertaken during this time period.

Other Significant Information

HVAC Contractors continue to be actively recruited for participation in the Program. To date 20 contractors throughout the UNS Electric service territory have signed agreements to participate in the program. Please see the attached CD for copies of the marketing materials.

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

UNS ELECTRIC ENERGY STAR LIGHTING PROGRAM

Description

On October 23, 2008, the Commission approved the UNS Electric Compact Fluorescent Lamp ("CFL") Buydown Program, marketed under the name of Energy Star Lighting Program ("Energy Star" or "Program"). The program promotes the installation of energy-efficient Energy Star approved lighting products by residential and commercial customers in the UNS Electric service territory.

Program Modifications

No modifications for this reporting period.

Program Goals, Objectives, and Savings Targets

The program objectives are to:

- Reduce peak demand and overall energy consumption in homes and small businesses;
- Increase the purchase of CFLs;
- Increase the availability of energy-efficient lighting products in the marketplace; and
- Increase the awareness and knowledge of retailers and UNS Electric customers on the benefits of energy-efficient lighting products.

Sales targets are as follows:

Year	2009	2010	2011	2012
Projected Lamp sales	82,802	85,286	87,845	90,480

Levels of Participation

No CFLs were sold during this reporting period.

Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period. Summit Blue has been selected as the MER contractor for the UNS Electric DSM programs (excluding LIW and Education & Outreach) and is in the process of developing a MER plan.

kW, kWh, and Therm Savings

There are no savings to report for this period

Problems Encountered and Proposed Solutions

No problems were encountered during this reporting period.

Costs Incurred

Costs incurred for this program during the reporting period are listed below:

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Energy Star Lighting (CFL)	\$ -	\$ -	\$ 2,050	\$ 8,790	\$ 4,330	\$ 1,560	\$ 16,730
Total	\$ -	\$ -	\$ 2,050	\$ 8,790	\$ 4,330	\$ 1,560	\$ 16,730

UNS Electric, Inc.

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Findings from All Research Projects

No research projects have been undertaken during this time period.

Other Significant Information

The program is scheduled to begin in January 2009. During November and December 2008, manufacturer contracts were negotiated, marketing literature and website information was developed, and preliminary contacts were made with retailers. A list of marketing materials is contained in Appendix 1. Please see the attached CD for copies of the marketing materials.

UNS Electric, Inc.

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UNS ELECTRIC SHADE TREE PROGRAM

Description

The UNS Electric Shade Tree Program ("Program") is primarily targeted to residential customers, including low-income families, but community organizations, commercial customers, and schools can also participate if they meet the program requirements. UNS Electric customers are allowed to purchase two desert adapted, 5-gallon trees per year (four for homes built before 1980) which must be planted on the south, west, or east side of the home. Customers purchase the tree(s) from the nursery of their choice, complete an application provided by UNS Electric, provide a copy of their paid invoice and submit all information to UNS Electric to receive a \$15.00 (per tree) credit on their electric bill.

Program Modifications

The UNS Electric Shade Tree Program was approved by the Commission on September 30, 2008. The Shade Tree Program will be marketed by UNS Electric as "Trees for You". UNS Electric has an annual budget of \$65,000 to market, manage, provide residential credits, and conduct onsite inspections. Criteria approved for this program is:

- Schools and Communities must meet the same requirements as residential customers for planting trees;
- Random field inspections will be done to ensure that purchased trees are planted in the location described on the application;
- South wall plantings are restricted to deciduous trees only; and
- Homes built prior to 1980 or with single pane glass are eligible to receive up to 4 trees (if proper planting space is available).

Program Modifications in upcoming reporting cycle

UNS Electric will be providing information on its website which includes the following:

- Program requirements including type of approved trees, planting and maintenance information and information of fire preventive measures;
- A printable application; and
- Customer contact information.

Additionally, UNS Electric will develop a brochure to be mailed to customers in their electric bills. The brochure will include a tear off application to be filled out and mailed in by the customer to receive their credit. The remaining portion of the brochure will contain general information including Blue Stake information and planting guidelines. The brochure also directs customers to the website for information on proper pruning and fire protection. UNS Electric will also have a supply of these brochures available to mail to customers who do not have internet access. Nurseries and other tree suppliers will be contacted about the program to encourage them to supply the required trees for the program. Please see the attached CD for copies of the marketing materials.

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

Program Goals, Objectives, and Savings Targets

The goal of the program is to promote energy conservation and the environmental benefits associated with planting low water usage trees. Along with the energy savings trees provide to the homes, trees also provide habitat for wildlife, absorb air and water pollutants, and control storm water runoff and soil erosion along with the aesthetic beauty they provide to neighborhoods and the community.

Levels of Participation

There has been no participation during this reporting period. The program is scheduled to begin January 2009.

Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period. Summit Blue has been selected as the MER contractor for the UNS Electric DSM programs (excluding LIW and Education & Outreach) and is in the process of developing a MER plan.

kW, kWh, and Therm Savings

There are no savings to report for this period.

Problems Encountered and Proposed Solutions

There are a limited number of merchants in the UNS Electric service territory that supply trees. In the Nogales area the only merchants that carry trees are K-Mart, Wal-Mart and Home Depot. Research has shown there are no independent nurseries in Nogales or surrounding areas.

A few nurseries in the Kingman area have reported concerns that some Mesquite and Palo Verde trees do not grow well in their elevated desert climate, which is generally cooler in the winter than other desert climates in Arizona. UNS Electric is researching additional hybrid tree species that are still desert adapted and low water use, but thrive at cooler winter temperatures. If applicable, these hybrid species will be included as acceptable trees for the program.

Costs Incurred

Costs incurred for this program during the reporting period are listed below:

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Shade Tree	\$ -	\$ -	\$ -	\$ 2,202	\$ -	\$ 588	\$ 2,790
Total	\$ -	\$ -	\$ -	\$ 2,202	\$ -	\$ 588	\$ 2,790

Findings from All Research Projects

No research projects were conducted during this reporting period.

Other Significant Information

No other significant information to report this period.

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

UNS ELECTRIC COMMERCIAL FACILITIES EFFICIENCY PROGRAM

Description

The UNS Electric Commercial Facilities Efficiency Program ("Program") is designed to minimize some of the barriers to implementation of energy-efficiency improvements in the commercial market, such as lack of capital, information search costs, transaction costs, performance uncertainty, and the so-called "hassle factor". Commercial firms generally concentrate on their core business, and do not have the wherewithal to analyze energy use and improve efficiency unaided.

The program provides incentives directly to contractors for the installation of selected high efficiency lighting; heating, ventilation and air conditioning (HVAC); and refrigeration measures. The incentives are set at a higher level for this market in order to encourage contractors to market and deliver the program thus offsetting the need for UNS Electric marketing and overhead expenses. The program also employs an internet-based measure analysis and customer proposal processing system which makes the process easier for both contractors and customers. The program also provides customers with the opportunity to propose innovative energy-efficiency solutions through custom energy-efficient measures.

UNS Electric selected KEMA as the IC for this program.

Program Modifications

No modifications for this reporting period.

Program Goals, Objectives, and Savings Targets

The primary objective of the Program is to encourage UNS Electric's small business customers to install energy-efficiency measures in existing facilities. More specifically, the program is designed to:

- Encourage commercial customers to install high-efficiency lighting equipment and controls, HVAC equipment, and energy-efficient refrigeration system retrofits in their facilities;
- Encourage contractors to promote the program and provide turn-key installation services to small business customers;
- Overcome the unique market barriers of the small business market including:
 - First costs and lack of access to capital for energy-efficiency improvements;
 - Lack of awareness and knowledge about the benefits and cost of energy-efficiency improvements;
 - Hassle and transactions costs; and
 - Performance uncertainty associated with energy-efficiency projects;
- Assure that the participation process is clear, easy to understand and simple; and
- Increase the awareness and knowledge of business owners, building owners and managers, and other decision-makers on the benefits of high-efficiency equipment and systems.

Savings targets are as follows:

Year	2009	2010	2011	2012
Energy Savings (kWh)	2,351,000	2,422,000	2,494,000	2,534,000

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

Levels of Participation

No applications were received during this reporting period.

Evaluation and Monitoring Activities and Results

No evaluation or monitoring is available for this reporting period. Summit Blue has been selected as the MER contractor for the UNS Electric DSM programs (excluding LIW and Education & Outreach) and is in the process of developing a MER plan.

kW, kWh, and Therm Savings

There are no savings to report for this period.

Problems Encountered and Proposed Solutions

No problems were encountered during this reporting period.

Costs Incurred

Costs incurred for this program during the reporting period are listed below:

DSM Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Admin	Program Total Cost
Commercial Facilities Efficiency	\$ -	\$ 45	\$ -	\$ 2,650	\$ -	\$ 679	\$ 3,375
Total	\$ -	\$ 45	\$ -	\$ 2,650	\$ -	\$ 679	\$ 3,375

Findings from All Research Projects

No research projects have been undertaken during this time period.

Other Significant Information

The Commercial Facilities Efficiency Program was approved by the Commission on September 30, 2008 and will be implemented January 2009. Information and application forms have been developed and will be posted to the web site. Marketing materials have been developed for distribution to commercial customers. In addition, UNS Electric employees have been educated so that they can promote the program while interacting with customers on a daily basis. Please see the attached CD for copies of the marketing materials.

UNS Electric, Inc.

SEMI-ANNUAL DSM PROGRESS REPORT FOR THE PERIOD: July through December 2008

APPENDIX 1 – MARKETING MATERIALS

Energy Smart Homes:

- ESH_Yard Sign (PDF)
- UES Energy Fair Letter (PDF)
- UES PostCard (PDF)
- UES EnergySmartHome WebPage (Word Document)

Education and Outreach Programs:

- Time-of-Use:
 - Advertising – UNSE PowerShift Ad NogIntl (PDF), UNSE PowerShift Ad Final (PDF)
 - Bill Insert – UNSE PowerShift Insert Final (PDF)
 - Brochure – PowerShift Final (PDF), UNSE PowerShift brochure Spanish Final (PDF)
 - Logo (JPG)
 - Radio – UES PowerShift TOU Radio 60 9_22_08 (MP3), UESe PowerSift TOU Radio 60 Span 9_22_08 (MP3)
 - Web – PowerShift_001 (JPG), PowerShiftWebPage (Word document), UNSE PowerShift email banner (JPG)
- Energy Advisor:
 - Bill Insert – UES EA unsert v1 (PDF)
 - Print – UES EA ad v1 (PDF)
 - Radio – UES EnergyQuiz407 60 Radio (MP3)
- Residential and Commercial Education:
 - Brochure – UES BrightSolutions brochure (PDF)
 - Displays – UES displays v2 (PDF)

Efficiency Home Cooling:

- Brochure – UNSE EHC broch SPA FINAL (PDF)
- Forms - UNSE EHC Contractor form v3 (PDF), UNSE EHC FAQ's v4 (PDF), UNSE EHC Rebate form v4 (PDF)
- Marketing Icon – UES-EHC-logo (JPG)
- Web – Efficient Home Heating WebPage (Word document)

Energy Star Lighting :

- Brochure – Recycling_Brochure_English (PDF), Recycling_Brochure_Spanish (PDF)
- Business Card – Program_Rep_BizCard (PDF)
- Displays – Special_Pricing_sticker (PDF), Table_Skirt_4ft (PDF), Table_Skirt_6ft (PDF), Wobbler_EnglishSide (PDF), Wobbler_SpanishSide (PDF)
- Handouts – Info_Handout_English (PDF), Info_Handout_Spanish (PDF)
- Icon – UES ESL logo Converted 9JPG)

UNS Electric, Inc.

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Shade Tree:

- Brochure – UES Trees for You v7brochure (PDF)
- WebPage – Shadetree WebPage (Word document)

Commercial Energy Solutions:

- Advertising – UNSE EHC Rebate form v4 (PDF)

Energy Efficiency:

- Radio – UES5tips50760 (MP3)
-

Handouts:

- DSM Elec Handout LHC Adv Cmte 0208 (Word Document)

STATE OF ARIZONA)
) ss.
COUNTY of PIMA)

Philip J. Dion, upon his oath, certifies that to the best of his knowledge, the labor and other expenses charged to UNS Electric, Inc.'s Demand-Side Management Programs approved in Decision Nos. 70522, 70523, 70524 and 70556 are incremental costs that are not being recovered in base rates.



Philip J. Dion
Vice President, Legal and
Environmental Services

SUBSCRIBED AND SWORN to me before this 31 day of March, 2009.


Notary Public

My Commission Expires:

6/10/2010